IN THE CLAIMS

1 (Previously Presented). A method comprising:

forming a substantially crystalline, non-switching ovonic material; and

forming a phase change material that changes between more conductive and less conductive states coupled to said non-switching ovonic material.

2 (Original). The method of claim 1 including forming said non-switching ovonic material over said phase change material and forming a second ovonic material under said phase change material.

3 (Original). The method of claim 1 including contacting said non-switching ovonic material with an electrode.

4 (Original). The method of claim 3 including forming a second ovonic material over said phase change material, forming said non-switching ovonic material under said phase change material, and contacting said non-switching and second ovonic materials with electrodes.

5 (Original). The method of claim 1 including forming said phase change material and said non-switching ovonic material in a pore formed in an insulator.

6 (Original). The method of claim 1 including forming a second ovonic material in a cup-shape over said phase change material.

7 (Original). The method of claim 6 including filling said cup-shaped ovonic material with an insulator.

8 (Original). The method of claim 7 including covering said phase change material with an insulating material.

9 (Original). The method of claim 8 including positioning said second ovonic material on a portion of said phase change material and covering the rest of said phase change material with nitride.

10 (Original). The method of claim 1 including forming a cup-shaped first ovonic material and forming said phase change material within said cup-shaped first ovonic material.

11 (Original). The method of claim 10 including providing a second ovonic material that contacts the upper side of said phase change material.

12 (Previously Presented). The method of claim 11 including covering a portion of said phase change material with an insulator and causing said second ovonic material to contact only a portion of said first phase change material.

13 (Original). The method of claim 10 wherein said non-switching ovonic material is a stable structural phase.

14 (Previously Presented). A memory comprising:

a substantially crystalline, non-switching ovonic material; and

a phase change material that changes between more conductive and less conductive states coupled to said non-switching ovonic material.

15 (Original). The memory of claim 14 including a second ovonic material over said phase change material.

16 (Original). The memory of claim 14 including an electrode contacting said non-switching ovonic material.

17 (Original). The memory of claim 15 including a first electrode contacting said non-switching ovonic material and a second electrode contacting said second ovonic material, said phase change material sandwiched between said non-switching ovonic material, said second

ovonic material, and said first and second electrodes, and said phase change material being sandwiched by said first and second electrodes.

18 (Original). The memory of claim 14 including a substrate under said first ovonic material.

19 (Original). The memory of claim 14 wherein said non-switching ovonic material is cup-shaped.

20 (Original). The memory of claim 19 wherein said phase change material is in said cup-shaped non-switching ovonic material.

21 (Original). The memory of claim 14 including a second ovonic material over said phase change material, said second ovonic material being cup-shaped.

22 (Original). The memory of claim 21 including an insulator in said cup-shaped second ovonic material.

23 (Original). The memory of claim 21 wherein said second ovonic material is in contact with said phase change material along a portion of the phase change material and the remaining portion of said phase change material is covered by an insulator.

24 (Original). The memory of claim 14 wherein said non-switching ovonic material is a chalcogenide.

25 (Previously Presented). The memory of claim 14 wherein said phase change material is a chalcogenide.

26 (Original). The memory of claim 14 wherein said non-switching ovonic material and said phase change material are formed of a chalcogenide.

27 (Previously Presented). A system comprising:

a processor-based device;

a wireless interface coupled to said processor-based device; and

a semiconductor memory coupled to said device, said memory including a substantially crystalline, non-switching ovonic material and a phase change material that changes between more conductive and less conductive states over said non-switching ovonic material.

28 (Original). The system of claim 27 wherein said wireless interface includes a dipole antenna.

29 (Original). The system of claim 27 wherein said non-switching ovonic material and said phase change material are both formed of a chalcogenide.

30 (Original). The system of claim 27 including a second ovonic material over said phase change material.